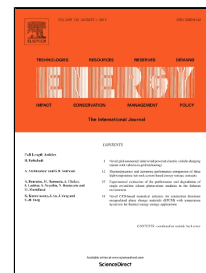


Accepted Manuscript

Thermo-economic analysis of the transcritical organic Rankine cycle using R1234yf/R32 mixtures as the working fluids for lower-grade waste heat recovery

Min-Hsiung Yang, Rong-Hua Yeh, Tzu-Chen Hung



PII: S0360-5442(17)31437-8
DOI: 10.1016/j.energy.2017.08.059
Reference: EGY 11428
To appear in: *Energy*
Received Date: 17 April 2017
Revised Date: 12 July 2017
Accepted Date: 13 August 2017

Please cite this article as: Min-Hsiung Yang, Rong-Hua Yeh, Tzu-Chen Hung, Thermo-economic analysis of the transcritical organic Rankine cycle using R1234yf/R32 mixtures as the working fluids for lower-grade waste heat recovery, *Energy* (2017), doi: 10.1016/j.energy.2017.08.059

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- ▶ The optimal mass fraction and the thermo-economic performance of R1234yf/R32 in TORC are obtained.
- ▶ The optimal T-s diagrams are obtained to fit various isentropic efficiencies of the expanders in TORC.
- ▶ The lower the condensation temperature is, the larger the optimal mass fraction of R32 will be.
- ▶ The correlations of the optimal mass fraction, pressure, temperature and performance are reported.

Download English Version:

<https://daneshyari.com/en/article/8072673>

Download Persian Version:

<https://daneshyari.com/article/8072673>

[Daneshyari.com](https://daneshyari.com)